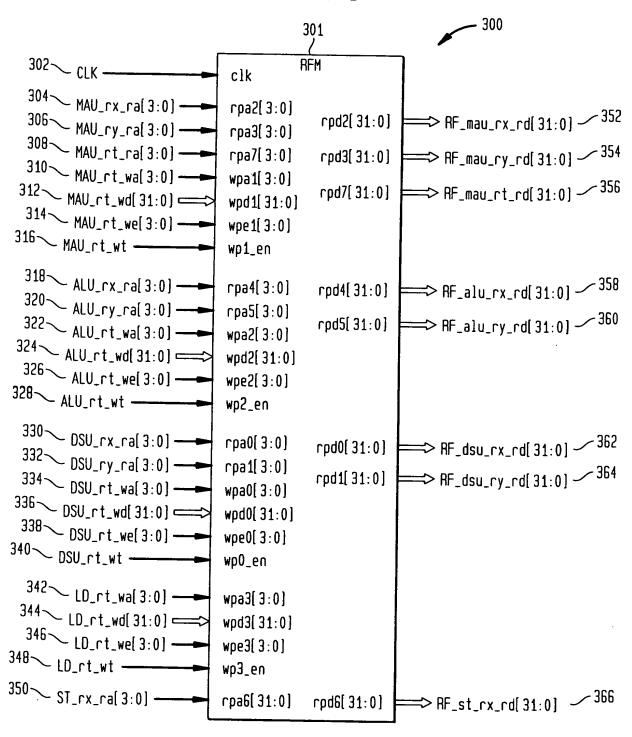
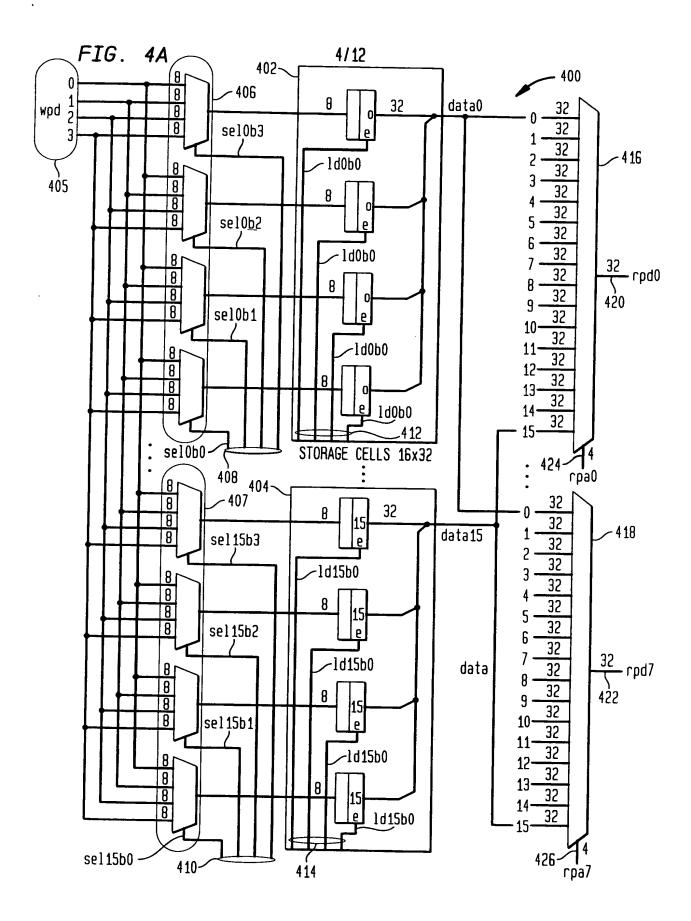
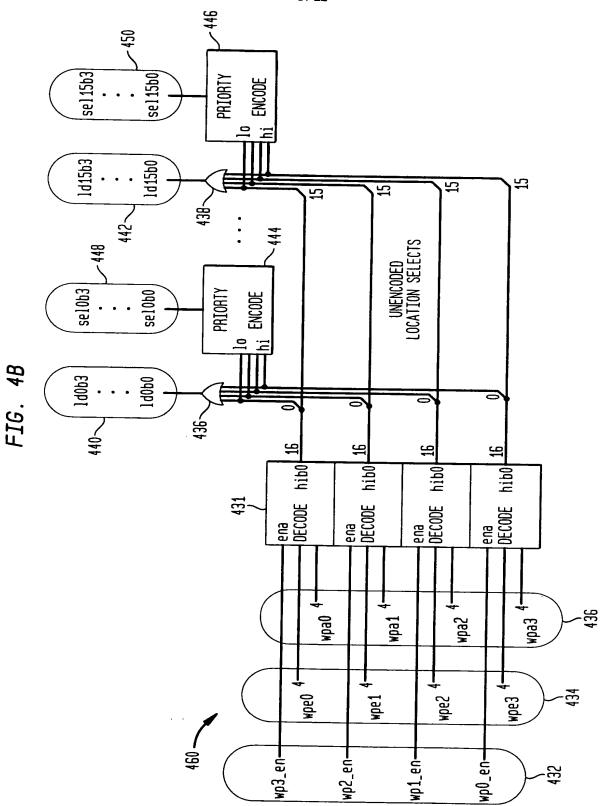


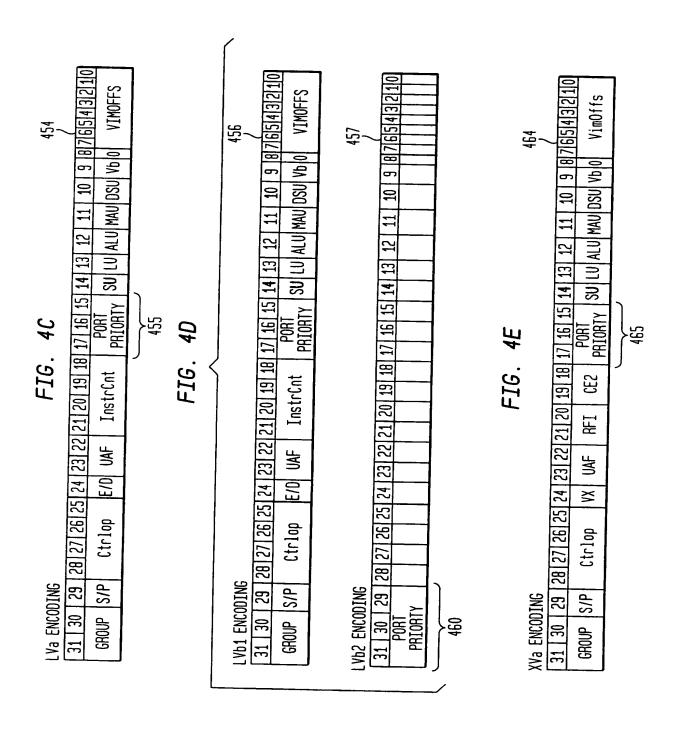
FIG. 3

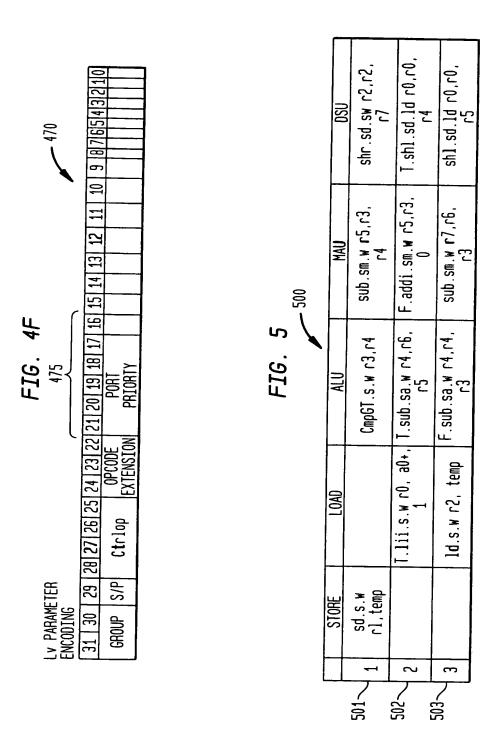












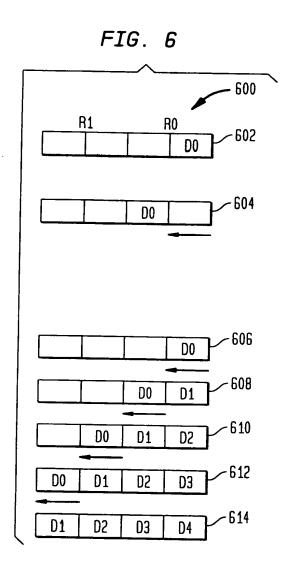


FIG. 7

```
start_0_0:
         lim.s.w. AO, COEFF
         lim.s.w. A1, DATA
 702
         lim.s.w. A2, OUTPUT
         lii.s.d R10, A0+,0
                                        ! Load 4 taps in R10/R11
        xor.pa.1d RO, rO, rO
                                        ! set RO/R1 = 0
                                        ! Load VIM Location 0 with 5 instructions
        lv.p.v0, 0, 5, d=, f=
          lii.s.h0 R0,A1+,1
                                       ! Load halfword from memory Data into RO.HO
                                       ! Shift Left RO/R1 1-halfword
          shli.sd.1d R0,r0,16
704
        sum2p.sm.4sh R2, r0, r10
                                         Mpy 4 halfword (data) x 4 taps (results summed in R2&R3)
        add.sa.lw R4, r2, r3
                                        ! Add to halfsums R2/R3 togther to R4
        sii.s.w R4, A2+, 1
                                        ! Store R4 word to output area
        lim.s.w R16, 1f
                                        ! set up outer loop
        eploopi0 12, 1f
                                       ! Loop (D-T) times = 16-4 = 32
        sspr.s.w r16, IEPOR1
                                       ! reset the loop start address
        !start pipeline
        xv.s V0,0,e=1d,f=
        xv.s v0,0,e=ldm,f=
        xv.s v0,0,e=ldm,f=
        xv.s v0,0,e=1dma,f=
                       lloop
        xv.s v0,0,e=1mdas,f=
        !shut down pipeline
       xv.s v0,0,e=mdas,f=
       xv.s v0,0,e=mdas,f=
       xv.s v0,0,e=mdas,f=
712
       xv.p v0.0.e=mas,f=
       xv.p v0,0,e=as,f=
xv.p v0,0,e=as,f=
       xv.p V0,0,e=s,f=
```

